DATASHEET - DMM-160/3/I5/P-B



Switch-disconnector, DMM, 160 A, 3 pole, with blue knob, in CI-K5 enclosure



Part no. Catalog No. DMM-160/3/I5/P-B 172792

Delivery program

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Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMM
			with blue knob
Information about equipment supplied			auxiliary contact fitted by user.
Notes			in CI-K5 enclosure
Number of poles			3 pole
Auxiliary contacts			
		N/0	0
7		N/C	0
Notes			1 padlock, # 5 mm
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
Design			surface mounting
			D
Contact sequence			$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	80
400 V Rated uninterrupted current	P I _u	kW A	80 160

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs, KEMA, EAC, Lloyds
Ambient temperature			
Operation	9	°C	-25 - +60
Storage	8	°C	-40 - +80
Overvoltage category/pollution degree			111/3

Rated impulse withstand voltage	U _{imp}	kV	6
Rated insulation voltage	Ui	V	1000
Mounting position			As required
Contacts			
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/0	0
		N/C	0
Electrical characteristics			
Rated operational voltage	Ue	V AC	690
Rated uninterrupted current	lu	А	160
Note on rated uninterrupted current $!_{\rm u}$			Rated uninterrupted current \boldsymbol{I}_{u} is specified for max. cross-section.
Short-circuit rating			
fuse			160
Rated conditional short-circuit current	lq	kA	415 V: 30 690 V: 50
Breaking current		kA	13.5
max. let-through energy		kA kA²s	86,9
Rated short-time withstand current (1 s current)	I _{cw}	Arms	2500
Note on rated short-time withstand current (rs current)	*CW	, uns	Current for a time of 1 second
Heat dissipation per pole, current-dependent	P _{vid}	W	7.4
Switching capacity	' vid	••	1.7
Rated breaking capacity cos φ to IEC 60947-3		A	
400/415 V		A	1080
500 V		A	528
690 V		A	336
Safe isolation to EN 61140			
Current heat loss per contact at l _e		W	7.4
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	le	А	160
500 V	le	A	160
690 V	le	A	160
AC-22A			
Rated operational current switch			
400 V 415 V	le	A	160
500 V	l _e	А	160
690 V	l _e	А	160
AC-23A			
Rated operational current switch			
400 V 415 V	l _e	A	140
500 V	le	A	66
690 V	l _e	A	42
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	Р	kW	80
500 V	Р	kW	45
690 V	Р	kW	37
Terminal capacities			
Flexible with ferrules to DIN 46228		mm ²	
flexible		mm ²	6 - 70
Stripping length		mm	21
Tightening torque for terminal screw		Nm	7

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	160
Heat dissipation per pole, current-dependent	P _{vid}	W	7.4
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			UV resistance only in connection with protective shield.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

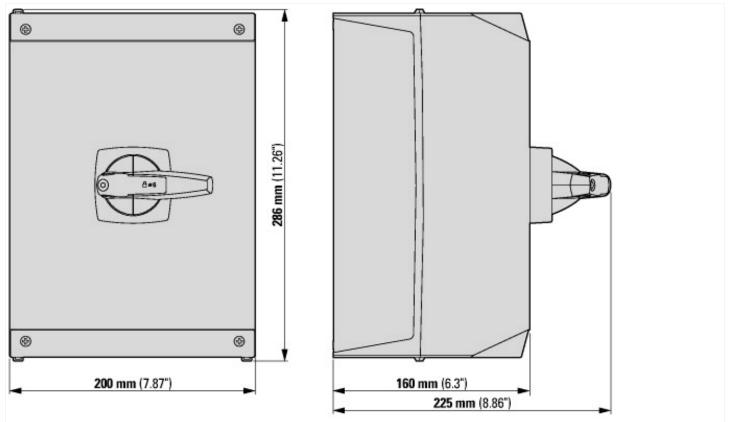
Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current lu		A	160
Rated permanent current at AC-23, 400 V		A	140
Rated permanent current at AC-21, 400 V		A	160

Reta bort-time withstand current low Image: A i	Deted encretion neuror at AC 2, 400 V	1444	0
Retadeperation power at AC-23, 400 V Image: Marcine Status S	Rated operation power at AC-3, 400 V	kW	0
Notiching power at 400 VIIIConditioned rated short-circuit current IqIIINumber of polesIIIINumber of auxiliary contacts as normally closed contactIIIINumber of auxiliary contacts as change-over contactIIIINumber of auxiliary contacts as change-over contactIIIIINotor drive optionalIII <td>Rated short-time withstand current lcw</td> <td>kA</td> <td>2.5</td>	Rated short-time withstand current lcw	kA	2.5
Condition and short-circuit current lqImage: A problemSolution and short-circuit current lqNumber of auxiliary contacts as normally closed contactImage: A problemImage: A problemNumber of auxiliary contacts as normally closed contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problemNumber of auxiliary contacts as change-over contactImage: A problemImage: A problem <td>Rated operation power at AC-23, 400 V</td> <td>kW</td> <td>0</td>	Rated operation power at AC-23, 400 V	kW	0
Number of pales 3 Number of auxiliary contacts as normally closed contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Not drive otigen as charge-over contact 0 Not drive otigen as charge-over contact 0 Notact construction 0 Stable for normoning centre 0 Stable for instruction board installation 0 Stable for instruction formation 0 Stable for instruction formation 0 Stable for instruction formation 0 Nore 0	Switching power at 400 V	kW	0
Amber of auxiliary contacts as normally closed contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as change-over contact 0 Motor drive optional 0 Motor drive integrated 0 Voltage release optional 0 Davice construction 0 Suitable for ground mounting 0 Suitable for front mounting 4-hole 0 Suitable for instruction 0 Suitable for instruction contantig 0 Suitable for instruction 0 Suitable for instruction function 0 Suitable for instruction formation 0 Suitable for instruction formation 0 Suitable for instruction 0 Suitable for instruction 0 Suitable for instruction	Conditioned rated short-circuit current Iq	kA	50
Number of auxiliary contacts as normally open contact Image: Contact as change-over contact Number of auxiliary contacts as change-over contact Image: Contact as change-over contact Motor drive optional Image: Contact as change-over contact Voltage release optional Image: Contact as change-over contact Voltage release optional Image: Contact as change-over contact Suitable for ground mounting Image: Contact as change-over contact Suitable for fort mounting entre Image: Contact as change-over contact Suitable for intermediate mounting Image: Contact as change-over contact Suitable for intermediate mounting Image: Contact as change:	Number of poles		3
Number of auxiliary contacts as change-over contact Image: Page of the section o	Number of auxiliary contacts as normally closed contact		0
Motor drive optional No Motor drive integrated No Voltage release optional No Device construction No Device construction Complete device in housing Suitable for ground mounting Yes Suitable for front mounting centre No Suitable for front mounting centre No Suitable for intermediate mounting So int thumb-grip Type of electrical connection of main circuit So int thumb-grip Suitable for intermediate mounting intervice So int thumb-grip Intervice So int thumb-grip Suitable for	Number of auxiliary contacts as normally open contact		0
Motor drive integrated Model Model Voltage release optional No No Device construction Complete device in housing Suitable for ground mounting Yes Suitable for front mounting 4-hole No Suitable for front mounting centre No Suitable for fintermediate mounting No Suitable for intermediate mounting No Solutable for intermediate mounting No Suitable for intermediate mounting Sint thumb-grip Type of central element Sint thumb-grip Support of main circuit Sint thumb-grip Support of main circuit Sint thumb-grip Support of main circuit Sint thumb-grip	Number of auxiliary contacts as change-over contact		0
Voltage release optionalNoDevice constructionComplete device in housingSuitable for ground mounting 4-holeYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationMoSuitable for intermediate mountingMoColour control elementMoType of control elementSoft thumb-gripType of electrical connection of main circuitMoDegree of protection (IP), front sideSoft Serve connectionPortee of protection (IP), front sideSoft Serve connectionSoft Serve connection of main circuitSoft Serve connectionPortee of protection (IP), front sideSoft Serve connectionPortee of protection (IP), front sidePortee of protectionPortee of protection (IP), front	Motor drive optional		No
Device constructionComplete device in housingSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoSuitable for intermediate mountingSuitableSuitable for intermediate mountingSuitable <td>Motor drive integrated</td> <td></td> <td>No</td>	Motor drive integrated		No
Suitable for ground mountingFor a constructionSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementOtherType of control elementSort thumb-gripInterlockableYesType of electrical connection of main circuitSortew connectionPegee of protection (IP), front sideSortew connection	Voltage release optional		No
Suitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementOtherType of control elementSort thumb-gripInterlockableYesType of electrical connection of main circuitSortew connectionDegree of protection (IP), front sideSortew connection	Device construction		Complete device in housing
Suitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementOtherType of control elementSoit thumb-gripInterlockableYesType of electrical connection of main circuitSoit and the soit of the soit o	Suitable for ground mounting		Yes
Suitable for distribution board installation No Suitable for intermediate mounting No Colour control element Other Type of control element Short thumb-grip Interlockable Yes Type of electrical connection of main circuit Section Degree of protection (IP), front side Section	Suitable for front mounting 4-hole		No
Suitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementOtherType of control elementSort thumb-gripInterlockableYesType of electrical connection of main circuitSorew connectionDegree of protection (IP), front sideSort all all all all all all all all all al	Suitable for front mounting centre		No
Colour control elementOtherType of control elementShort thumb-gripInterlockableYesType of electrical connection of main circuitSorew connectionDegree of protection (IP), front sideSorew connection	Suitable for distribution board installation		No
Type of control element Short thumb-grip Interlockable Yes Type of electrical connection of main circuit Connection Degree of protection (IP), front side Connection	Suitable for intermediate mounting		No
Interlockable Yes Type of electrical connection of main circuit Image: Strew connection Degree of protection (IP), front side Image: Strew connection	Colour control element		Other
Type of electrical connection of main circuit Screw connection Degree of protection (IP), front side IP65	Type of control element		Short thumb-grip
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) Other	Degree of protection (IP), front side		IP65
	Degree of protection (NEMA)		Other

Dimensions



Assets (links)

Declaration of CE Conformity 00003270 Instruction Leaflets IL008006ZU2018_05

Additional product information (links)

IL008006Z Switch-disconnectors

IL008006Z Switch-disconnectors

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008006ZU2018_05.pdf